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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/670,805	09/25/2003	Jurgen Dellmann	2002P17355US	7574

7590 01/06/2005

SIEMENS CORPORATION  
INTELLECTUAL PROPERTY DEPT.  
170 WOOD AVENUE SOUTH  
ISELIN, NJ 08830

EXAMINER


KERSHTEYN, IGOR

ART UNIT	PAPER NUMBER
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3745

DATE MAILED: 01/06/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/670,805	DELLMANN ET AL. 	
	<b>Examiner</b>	<b>Art Unit</b>	
	Igor Kershteyn	3745	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 September 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)             | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. ____.  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date ____.   | 6) <input type="checkbox"/> Other: ____.                                    |

## **DETAILED ACTION**

### ***Drawings***

New corrected drawings in compliance with 37 CFR 1.121(d) are required in this application because figures on drawing sheets 3 and 4 do not have figure numbers, numerals and lead lines indicating the components. All text in the drawing sheet no. 3 must be clearly written in English language. Applicant is advised to employ the services of a competent patent draftsman outside the Office, as the U.S. Patent and Trademark Office no longer prepares new drawings. The corrected drawings are required in reply to the Office action to avoid abandonment of the application. The requirement for corrected drawings will not be held in abeyance.

### ***Specification***

The disclosure is objected to because of the following informalities:

In page 2, lines 1-4 should be deleted because claims should not be mentioned in the specification.

Appropriate correction is required.

### ***Claim Objections***

Claims 1 and 9 are objected to because of the following informalities:

Claim 1 recites the limitation "the hollow space" in line 9. There is insufficient antecedent basis for this limitation in the claim.

Claim 1 recites the limitation "the base area" in line 15. There is insufficient antecedent basis for this limitation in the claim.

Claim 9 recites the limitation "the hollow space" in lines 13-14. There is insufficient antecedent basis for this limitation in the claim.

Claim 9 recites the limitation "the base area" in line 18. There is insufficient antecedent basis for this limitation in the claim.

Claim 1 recites the limitation "the rotor" in line 3. There is insufficient antecedent basis for this limitation in the claim.

Claim 9 recites the limitation "the rotor" in line 7. There is insufficient antecedent basis for this limitation in the claim.

Appropriate correction is required.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-19 are rejected under 35 U.S.C. 102(b) as being anticipated by Tobery (4,962,640).

In figures 1-5, Tobery teaches a turbine comprising a compressor section 47 for compressing air, a combustion section 48 for receiving the air and a fuel and combusting the fuel/air mixture to generate a working gas, a turbine vane 7 adapted for

receiving the working gas comprising a hollow sectional element 2 which extends radially with respect to a rotor and which has a transverse platform 13,14 at each of its ends, whereby the sectional element 2 is surrounded by hot working medium, a hollow inset 22 located in the sectional elements 2 which stretches between the two platforms 13,14 having a certain distance from the inside of the sectional element 2 and having a base 20 which faces one of the two transverse platforms 14, a coolant flowing in radially through the other platform into a hollow space 24 of the inset 22 and at least partially flowing out through baffle cooling openings 42 provided on the inset 22 aligned to the inside, and a recess (not numbered) that is provided in the platform 14 located immediately opposite the base 20 wherein the inset 22 stretches into the recess so that areas with reduced predefined flow rates are present for forming a particle trap in a base area of the inset.

Claims 1-7, and 9-19 are rejected under 35 U.S.C. 102(b) as being anticipated by Papageorgiou (5,511,937).

In figures 1-3, Papageorgiou teaches a turbine comprising a compressor section 1 for compressing air, a combustion section 2 for receiving the air and a fuel and combusting the fuel/air mixture to generate a working gas, a turbine vane 17 adapted for receiving the working gas comprising a hollow sectional element 25 which extends radially with respect to a rotor and which has a transverse platform 26,27 at each of its ends, whereby the sectional element 25 is surrounded by hot working medium, a hollow inset 42,44 located in the sectional element 25 which stretches between the two

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platforms 26,27 having a certain distance from the inside of the sectional element 25 and having a base (not numbered) which faces one of the two transverse platforms 26, a coolant flowing in radially through the other platform into a hollow space (not numbered) of the inset 42,44 and at least partially flowing out through baffle cooling openings 70,71 provided on the inset 42,44 aligned to the inside, and a recess (not numbered) that is provided in the platform 26 located immediately opposite the base wherein the inset 42,44 stretches into the recess so that areas with reduced predefined flow rates are present for forming a particle trap in a base area of the inset 42,44.

### ***Prior Art***

Prior art made of record but not relied upon is considered pertinent to Applicant's disclosure and consist of six patents.

Kercher (3,540,810) is cited to show a turbine vane having an airfoil, two platforms, and an insert, but fails to teach a base of the insert and a recess in the platform.

Bobo et al. (4,126,405) is cited to show a turbine vane having an airfoil, two platforms, and an insert, a recess in the platform, and a base of the insert extending into the recess but fails to teach a plurality of cooling holes on the side wall of the insert.

Peill (4,252,501) is cited to show a turbine vane having an airfoil, two platforms, an insert, and a recess in the platform but fails to teach a base of the insert extending into a recess in the platform.

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Frederick et al. (5,207,556) is cited to show a turbine vane having an airfoil, two platforms, and an insert having a base, but fails to teach a recess in the platform.

Storey et al. (6,398,486) is cited to show a turbine vane having an airfoil, two platforms, and an insert having a base, but fails to teach a recess in the platform.

Burdgick et al. (6,561,757) is cited to show a turbine vane having an airfoil, two platforms, and an insert having a base, but fails to teach a recess in the platform.

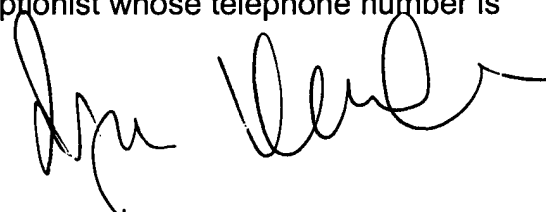
**Contact information**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Kershteyn whose telephone number is **(571)272-4817**. The examiner can be reached on Monday-Friday from 8:00 a.m. to 4:30 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Look, can be reached on **(571)272-4820**. The fax number is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308 0861.

IK  
December 17, 2004



**Igor Kershteyn**  
**Patent examiner.**  
**Art Unit 3745**



**EDWARD K. LOOK**  
**SUPERVISORY PATENT EXAMINER**  
**TECHNOLOGY CENTER 3700**

1/5/05